



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,588	03/19/2004	Kenji Koyama	1529.70167	7303

7590 10/21/2005

Patrick G. Burns, Esq.  
GREER, BURNS & CRAIN, LTD.  
Suite 2500  
300 South Wacker Drive  
Chicago, IL 60606

EXAMINER

FIGUEROA, NATALIA

ART UNIT	PAPER NUMBER
----------	--------------

2651

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/804,588

Applicant(s)

KOYAMA, KENJI

Examiner

Natalia Figueroa

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. Applicant's amendment, filed 05 August 2005, is hereinafter set on record, including those amendments made to the abstract.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 2-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohmori et al (US Pub. No. US 2002/006745 A1), hereinafter Ohmori.

RE claim 4, Ohmori discloses a disk drive for writing and reading data in accordance with a transfer command received from a host device (figs. 1 and 4, [0004] and [0040-0041]), said disk drive comprising a disk control unit including a clock control part that sets an operation clock used by said disk drive based on said transfer command ([0009]); and a disk control part that controls writing and reading based on said transfer command (fig. 1 and [0040-0041]) (figs. 1 and 4, [0009] and [0040-0041]); an interface that inputs and outputs data from and to said host device (fig. 1 and [0036]); a memory that temporarily holds the data (fig. 1 and [0035]); an operation clock generation part that changes the operation clock used by said disk control unit ([0009]), said interface and said memory based on the setting of said operation clock (fig. 1 and [0035-0036]); a recording medium that holds data ([0037]); a read and write part that writes data into said recording medium or reads data from said recording medium ([0038]); and a

Art Unit: 2651

mechanism that controls the position of writing or reading in said recording medium ([0038-0040]).

RE claim 2, Ohmori further discloses that said transfer command includes an instruction for writing or reading data, a transfer mode, and a transfer rate (fig. 4 and [0057]).

RE claim 3, Ohmori further discloses that said clock control part selects the value of a minimum operation clock required to execute said transfer command (or optimizing the transfer rate, [0009] and [0048]).

RE claim 5, Ohmori discloses a disk control method for controlling a disk drive in accordance with a transfer command received from a host device (figs. 1 and 4, [0004] and [0040-0041]), said disk control method comprising the steps of setting an operation clock used by said disk drive based on said transfer command ([0009]); changing the operation clock used by said disk drive based on said transfer command (fig. 1, [0035-0036] and [0057]); and controlling writing and reading based on said transfer command (fig. 1 and [0040-0041]).

RE claim 6, Ohmori further discloses that said transfer command includes an instruction for writing or reading data, a transfer mode, and a transfer rate (fig. 4 and [0057]).

RE claim 7, Ohmori further discloses that said setting is to select the value of a minimum operation clock required to execute said transfer command (or optimizing the transfer rate, [0009] and [0048]).

RE claim 8, Ohmori discloses a disk control program for making a computer implement a disk control method for controlling a disk drive in accordance with a transfer command received from a host device (figs. 1 and 4, [0004] and [0040-0041]), said disk control program being operable to make said computer perform the steps comprising setting an operation clock used by

Art Unit: 2651

said disk drive based on said transfer command ([0009]); changing the operation clock used by said disk drive based on said setting of the operation clock (fig. 1, [0035-0036] and [0057]); and controlling writing and reading based on said transfer command (fig. 1 and [0040-0041]).

RE claim 9, Ohmori further discloses that said transfer command include an instruction for writing or reading data, a transfer mode, and a transfer rate (fig. 4 and [0057]).

RE claim 10, Ohmori further discloses that said setting is to select the value of a minimum operation clock required to execute said transfer command (or optimizing the transfer rate, [0009] and [0048]).

#### *Response to Arguments*

4. Applicant's arguments, see pages 7-8, filed 05 August 2005, with respect to the rejection(s) of claim(s) 2-10 under 35 USC 102 have been fully considered but they are not persuasive. The applicant argues, "Ohmori, however, does not disclose (or suggest) changing of the operation clocks of the HDC and memory based on the transfer command from the host device. Ohmori does not aim to reduce power consumption when writing or reading data, as in the present invention." The examiner respectfully disagrees, because invention as claimed is presented in Ohmori, please revise rejections as stated above. Furthermore, the claims as presented do not disclose power consumption as the goal of the invention.

#### *Conclusion*

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2651


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Figueroa whose telephone number is (571) 272-7554. The examiner can normally be reached on Monday - Thursday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
NFM

  
**DAVID HUDSPETH**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**